

**REMARKS**

The present Amendment is in response to the Office Action mailed April 19, 2005, in the above-identified application.

As the initial matter, Applicant would like to thank the Examiner for conducting a telephone interview of the above-identified application on June 22, 2005. Applicant has reviewed and agrees with the content of the Interview Summary mailed June 24, 2005. During the telephone interview, the Examiner and the undersigned discussed the Office Action, including the prior art patents cited by the Examiner. Specifically, the Examiner and the undersigned discussed U.S. Patent No. 4,345,899 to Vlock, United States Patent Application Publication No. U.S. 2002/0172923 to Strong et al. and U.S. Patent No. 6,042,376 to Cohen et al. During the interview, the undersigned respectfully noted that one skilled in the art would have no motivation to refer to the Cohen patent, because Cohen teaches a tool for cleaning out dentin from a root canal. Moreover, the working portion of the Cohen instrument tapers continuously from a pointed tip at a lower end thereof to an upper end. The undersigned also pointed out that the cutting head disclosed in the present application has a annular cutting surface that includes a spherically-shaped cutting surface having cutting edges provided thereon. This structure is clearly neither disclosed nor suggested in any of the prior art references of record in the present application.

As noted above, in the present Amendment, claims 1, 9, 11, 15 and 16 have been amended and claim 8 has been canceled. In particular, claim 1 has been amended to incorporate the limitations of claim 8 therein and claim 15 has been amended to recite that the "cutting head has a spherical cutting surface extending about a first circumferential portion" thereof. Applicants have also added new claims 22 and 23, which are fully

supported by the original specification and add no new matter. Applicant has also amended paragraphs 11 and 39 of the specification to include a discussion that in certain preferred embodiments the cutting head has a "spherical cutting surface." Support for the amendment to claim 15, new claims 22 and 23 and the amendment to specification paragraphs 11 and 39 is found in the originally filed specification at, *inter alia*, FIGS. 3A, 3B, 6A and 6B.

Claim 1 is patentable over the references cited by the Examiner because none of the references teach or suggest an endodontic instrument including "a cutting head located along said shaft adjacent said lower end, wherein said cutting head has an annular cutting surface extending about a first circumferential portion of said cutting head and a flat non-cutting surface extending about a second circumferential portion of said cutting head." As noted above, the Cohen reference teaches an endodontic instrument that is used for cleaning out dentin from a root canal. Thus, one skilled in the art would have no motivation to refer to Cohen when seeking to develop a cutting instrument for accessing a pulp chamber of a tooth. Moreover, Cohen does not disclose a "cutting head located along said shaft adjacent said lower end." (Emphasis added) Cohen's cutting surface extends along the entire length of the working portion of the tool shown in the '376 patent. Cohen does not have a cutting head provided adjacent a lower end of the tool. For these reasons, claim 1 is patentable over the art of record and is otherwise allowable. Claims 2-7 and 9-14 are also allowable, *inter alia*, by virtue of their dependence from claim 1.

Claim 15, as amended, is patentable over the art of record because none of the references disclose or suggest an endodontic instrument adapted for accessing a pulp chamber including "a cutting head located along said shaft adjacent said

pointed tip, wherein said cutting head has a spherical cutting surface extending about a first circumferential portion of said cutting head and a flat non-cutting surface extending about a second circumferential portion of said cutting head." Clearly, none of the prior art references disclose a spherically-shaped cutting surface provided on a cutting head whereby the spherically-shaped cutting surface extends about a first portion of the cutting head and a flat non-cutting surface extends about a second portion of the cutting head.

As noted above, Applicant has also added new claims 22 and 23 via the present Amendment. New claims 22 and 23 are supported by the originally filed specification at, *inter alia*, FIGS. 3A, 3B, 6A and 6B. New claim 22 is patentable over the art of record because none of the references disclose or suggest an endodontic instrument including "a cutting head provided at the lower end of said shaft adjacent said pointed tip, wherein said cutting head has a spherical cutting surface extending about a first circumferential portion of said cutting head and a flat non-cutting surface extending about a second circumferential portion of said cutting head." Claim 23 is allowable, *inter alia*, by virtue of its dependence from claim 22, which is allowable for the reasons set forth above.

During the telephone interview, the Examiner and the undersigned also explored the possibility of Applicant filing a continuing application with method claims directed to accessing a pulp chamber using an instrument having a rigidly fixed stop. The Examiner's initial indication was that method claims directed to such a procedure did not appear to be disclosed in the prior art references of record. Applicant intends to file a continuing application directed to a method of using the tool disclosed herein for accessing a pulp chamber.

As it is believed that all of the rejections set forth in the Office Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone Applicant's Attorney at (908) 654-5000 in order to overcome any additional objections which the Examiner might have.

If there are any additional charges in connection with this requested Amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: July 14, 2005

Respectfully submitted,

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